

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## **IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.

Substitute Form PTO-1449 (Modified) <b>MAR 15 2004</b> INFORMATION DISCLOSURE STATEMENT by Applicant (Use several sheets if necessary) (b)	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. <b>10449-033001</b>	Application No. <b>09/748,400</b>
	Applicant <b>Koji Hayashi et al.</b>			
	Filing Date <b>December 26, 2000</b>		Group Art Unit <b>2615 2653</b>	

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
<i>W</i>	AA	5,317,553	05/31/94	Ohga et al.	<i>369</i>	<i>53.18</i>	

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
<i>W</i>	AB	4-103079	04/06/92	Japan (corresponds to U.S. 5,317,553, enclosed)	<i>/</i>	<i>/</i>		

**Other Documents (include Author, Title, Date, and Place of Publication)**

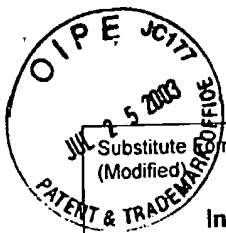
Examiner Initial	Desig. ID	Document
<i>W</i>	AC	Abstract for Japanese Patent No. JP1312736, Publication Date December 18, 1989, Title: Optical Disk Device and Optical Disk
<i>W</i>	AD	Abstract for Japanese Patent No. JP3260958, Publication Date: November 20, 1991, Title: Optical Disk Device
<i>W</i>	AE	Abstract for Japanese Patent No. JP6076401, Publication Date: March 18, 1994, Title: Magneto-Optical Recording Method for Magneto-Optical Disk of Large Heat Time Constant, Recording Device and Magneto-Optical Disk
<i>W</i>	AF	Abstract for Japanese Patent No. JP6162511, Publication Date: June 10, 1994, Title: Recording Method for Optical Disk Employing Draw Type Disk Recording Device
<i>W</i>	AG	Abstract for Japanese Patent No. JP10241165, Publication Date: September 11, 1998, Title: Pulse Generating Circuit and Optical Disc Driver

**RECEIVED**

MAR 18 2004

Technology Center 2600

Examiner Signature <i>Kim Chun</i>	Date Considered <i>7/21/04</i>
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. <b>10449-033001</b>	Application No. <b>09/748,400</b>
	Applicant <b>Koji Hayashi et al.</b>		
	Filing Date <b>December 26, 2000</b>	Group Art Unit <b>2615-2653</b>	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
<i>KE</i>	AA	6,084,731	Jul. 4, 2000	Uchida et al.			
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

RECEIVED

JUL 28 2003

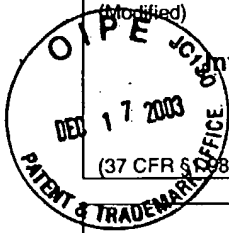
Technology Center 2600

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature <i>Kim Chen</i>	Date Considered <i>7/21/04</i>
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified) U.S. Department of Commerce Patent and Trademark Office Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR § 1.98(b))	Attorney's Docket No. 10449-033001	Application No. 09/748,400
	Applicant Koji Hayashi et al.	
	Filing Date December 26, 2000	Group Art Unit <del>2615</del> 2653



## U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
KL	AA	6,584,053	06/24/03	Tsukihashi	369	53.34	
	AB						
	AC						
	AD						
	AE						
	AF						

**RECEIVED**  
DEC 18 2003  
Technology Center 2600

## Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
KL	AG	408147879A	06/07/96	Japan				

## Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
KL	AH	Japan registered publication no. 2842262, equivalent to above noted document AG
	AI	
	AJ	
	AK	

Examiner Signature <i>[Signature]</i>	Date Considered 7/21/04
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified) <b>Information Disclosure Statement</b> <b>by Applicant</b> (Use several sheets if necessary) (37 CFR 1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10449-033001	Application No. 09/748,400
	Applicant Koji Hayashi et al.		
	Filing Date December 26, 2000	Group Art Unit 2653	

## U.S. Patent Documents

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
lc	AA	5,305,298	04/19/1994	Tsuneshi Yokota	/	/	
lc	AB	5,910,935	06/08/1999	Hirihito Takagi et al.	/	/	
lc	AC	6,208,599	03/27/2001	Misao Fukuda	/	/	
lc	AD	6,438,083	08/20/2002	Jacobus P.C. Kroon	/	/	
lc	AE	6,487,616	11/26/2002	Koji Hayashi	/	/	
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

RECEIVED

APR 02 2003

Technology Center 2600

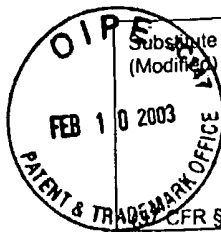
## Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
lc	AL	11-259982	24.09.1999	Japan	/	/		
lc	AM	0 974 966	26.01.2000	EPO	/	/		
	AN							
	AO							
	AP							

## Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature <i>Kim Chun</i>	Date Considered 7/21/04
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	


 Substitute Form PTO-1449  
 (Modified)

 U.S. Department of Commerce  
 Patent and Trademark Office

 Attorney's Docket No.  
 10449-033001

 Application No.  
 09/748,400

**Information Disclosure Statement  
 by Applicant**  
 (Use several sheets if necessary)

 Applicant  
 Koji Hayashi et al.

 Filing Date  
 December 26, 2000

Group Art Unit

2653

CFR §1.98(b)

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA						
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

RECEIVED

FEB 12 2003

Technology Center 2600

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
lc	AL	1998-028125	15.07.98	Korea	/	/		
lc	AM	1999-024893	06.04.99	Korea	/	/		
lc	AN	63-52393	05.03.88	Japan	/	/		
lc	AO	H11-66745	09.03.99	Japan	/	/		
	AP							

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature

E. Kim

Date Considered

7/21/04

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)

Substitute Form PTO-1449 (Modified) Information Disclosure Statement by Applicant (Use several sheets if necessary) 37 CFR § 1.102(b)	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 10449-033001	Application No. 09/748,400
	Applicant Koji Hayashi et al.			
	Filing Date December 26, 2000		Group Art Unit 2615 <b>2653</b>	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
<i>KE</i>	AA	5,010,534	04/23/91	Enari et al.			
<i>KE</i>	AB	5,477,516	12/19/95	Takezawa			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

**RECEIVED**  
MAY 10 2004  
Technology Center 2600

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature <i>Kim Kim</i>	Date Considered <i>7/21/04</i>
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10449-033001	Application No. 09/748,400
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Koji Hayashi et al.	
		Filing Date December 26, 2000	Group Art Unit 2653

## U.S. Patent Documents

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
K	AA	4,507,767	03/26/85	Takasugi	/	/	
la	AB	4,546,462	10/08/85	Koishi et al.	/	/	
la	AC	4,800,548	01/24/89	Koishi et al.	/	/	
laC	AD	4,831,611	05/16/89	Sasaki et al.	/	/	
Kc	AE	4,858,219	08/15/89	Yoshikawa	/	/	
Kc	AF	5,161,144	11/03/92	Takeuchi et al.	/	/	
Kc	AG	5,170,389	12/08/92	Numata et al.	/	/	
Kc	AH	5,521,893	05/28/96	Yamasaki et al.	/	/	
la	AI	5,682,366	10/28/97	Yamanaka et al.	/	/	

## Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AJ							

## Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AK	

Examiner Signature <i>Kim Chm</i>	Date Considered 7/21/04
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 10449-033001	Application No. 09/748,400
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Koji Hayashi et al.	
		Filing Date December 26, 2000	Group Art Unit 2653

## U.S. Patent Documents

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
lc	AA	5,220,545	06/15/1993	Tomimitsu	/	/	
lc	AB	5,289,440	02/22/1994	Bakx	/	/	
lc	AC	5,436,875	07/25/1995	Shinada	/	/	
lc	AD	5,491,677	02/13/1996	Sasaki.	/	/	
lc	AE	5,532,991	07/02/1996	Sasaki.	/	/	
lc	AF	5,745,445	04/28/1998	Yasukohchi et al.	/	/	
lc	AG	5,815,472	09/29/1998	Kuroda et al	/	/	
lc	AH	5,818,801	10/06/1998	Watanabe et al.	/	/	
lc	AI	5,953,291	09/14/1999	Yasukohchi et al.	/	/	
lc	AJ	6,055,216	04/25/2000	Shintani	/	/	
lc	AK	6,115,337	09/05/2000	Takagi et al.	/	/	

RECEIVED

MAR 26 2002

Technology Center 2600

## Foreign Patent Documents or Published Foreign Patent Applications

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							
	AN							
	AO							
	AP							

## Other Documents (include Author, Title, Date, and Place of Publication)

Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature <i>Kiran Chur</i>	Date Considered 7/20/04
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

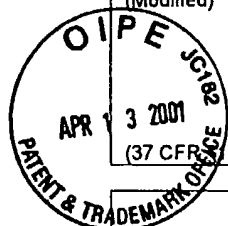
Substitute Form PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark OfficeAttorney's Docket No.  
10449-033001Application No.  
09/748,400**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

Applicant  
Koji Hayashi et al.Filing Date  
December 26, 2000

Group Art Unit

2653



(37 CFR 1.98(b))

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
ke	AA	5,212,678	05/18/93	Roth et al.	369	47.33	
ke	AB	5,463,607	10/31/95	Roth et al.	369	47.33	
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

RECEIVED  
APR 17 2001  
Technology Center 2600

**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
ke	AL	3-228266	10/09/91	Japan	/	/	X	
ke	AM	<del>2-226066</del> 2-223066	09/05/90	Japan	/	/	X	
ke	AN	2000-40302	02/08/00	Japan	/	/	X	
ke	AO	10-49990	02/20/98	Japan	/	/	X	
ke	AP	10-63433	03/06/98	Japan	/	/	X	

**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature

Kim Chun

Date Considered

7/19/04

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Form PTO-1449 (Modified)  <b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office		Attorney's Docket No. 10449-033001	Application No. 09/748,400
	Applicant Koji Hayashi et al.			
	Filing Date December 26, 2000		Group Art Unit 2653	

U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	5,212,678	05/18/93	Roth et al.			
	AB	5,463,607	10/31/95	Roth et al.			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

RECEIVED  
OCT 04 2001  
Technology Center 2600

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AL	3-228266	10/09/91	Japan			X	
	AM	2-223066	09/05/90	Japan			X	
	AN	2000-40302	02/08/00	Japan			X	
	AO	10-49990	02/20/98	Japan			X	
	AP	10-63433	03/06/98	Japan			X	

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AQ	
	AR	
	AS	
	AT	

Examiner Signature <i>Kim Chun</i>	Date Considered 7/19/04
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	